

ATTACHMENT A: CROSS REFERENCES

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### Cross Reference

This application is a divisional of U.S. Patent Application S/N 09/046,120 filed 20 Mar 1998 by E. B. Boden, D. G. Geiser and F. V. Paxhia for System and Method for Business Process Space Definition.

09/046,120

[illegible]

1 1. [Amended] Method for representing any business process  
2 or processes as a set or sets of tuples, comprising the  
3 steps of:

4 defining each of a plurality of processes as a 3-tuple  
5 including a noun, a verb and an attribute; and

6 displaying a selected process as a point in navigation  
7 space.

1 2. The method of claim 1, further comprising the steps of:

2 displaying selection lists, including a noun selection  
3 list, a verb selection list and an attribute selection  
4 list;

5 responsive to user selection of a 3-tuple including  
6 noun, a verb and an attribute from said selection  
7 lists, highlighting the point in navigation space  
8 corresponding to said 3-tuple.

9 3. [Amended] The method of claim 1, further comprising  
10 the steps of:

11 responsive to user selection of a zoom in action in

12 connection with a selected process point, determining  
13 if said selected process point is zoomable; and, if so  
  
14 highlighting in a new navigation space the process  
15 points referenced by selected process point  
16 definitions;

17        said zoom actions displaying within nested navigation  
18        space logical changes in context for navigating said  
19        process space to explore or define business processes.

1        4.    The method of claim 3, further comprising the steps of:

2 responsive to user selection of a zoom out action in  
3 connection with a selected process point, determining  
4 if said selected process point is zoomable; and, if so

5       highlighting in a new navigation space the zoomed to  
6       process point.

1        5.    [Amended] The method of claim 1, further comprising the  
2        steps of:

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3      responsive to user selection of a create process
4      action, accepting and storing a 3-tuple and process

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5 definition in a database of generally represented  
6 business processes.

1 6. [Amended] The method of claim 5, further comprising the  
2 steps of:

3 responsive to user selection of a process edit action  
4 in connection with a selected process, displaying the  
5 process definition corresponding to said selected  
6 process for editing said selected process by said user.

1 7. [Amended] The method of claim 5, further comprising the  
2 steps of:

3 responsive to user selection of a run process action in  
4 connection with a selected process from within the  
5 context of all other defined business processes for an  
6 organization in a multi-dimensional process space,  
7 executing said process.

1 9. [Amended] System for representing any business process  
2 or processes, comprising:

3 a store containing for each of a plurality of said  
4 processes a 3-tuple including a noun, a verb and an

5 attribute; and

6 a display operable to display a selected process as a  
7 point in navigation space.

1 10. [Amended] A program storage device readable by a  
2 machine, tangibly embodying a program of instructions  
3 executable by a machine to perform method steps for  
4 representing any business processes, said method steps  
5 comprising:

6 defining each of a plurality of said processes as a 3-  
7 tuple including a noun, a verb and an attribute; and

8 displaying a selected process as a point in navigation  
9 space; said point representing logical changes in  
10 context of said navigation space for exploring or  
11 defining business processes.

1 11. [Amended] An article of manufacture comprising:

2 a computer usable medium having computer readable  
3 program code means embodied therein for displaying  
4 representations of any business processes, the computer  
5 readable program means in said article of manufacture

6 comprising:

7 computer readable program code means for causing a  
8 computer to effect defining each of a plurality of said  
9 processes as a 3-tuple including a noun, a verb and an  
10 attribute; and

11 computer readable program code means for causing a  
12 computer to effect displaying a selected process as a  
13 point in navigation space; said process point  
14 representing logical change in context of said  
15 navigation space for exploring or defining business  
16 processes.



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10 responsive to user selection of a zoom in action in  
11 connection with a selected process point, determining  
12 if said selected process point is zoomable; and, if so  
  
13 highlighting in a new navigation space the process  
14 points referenced by selected process point  
15 definitions;

16 said zoom actions displaying within nested navigation  
17 space logical changes in context for navigating said  
18 process space to explore or define business processes.

1 4. The method of claim 3, further comprising the steps of:

2 responsive to user selection of a zoom out action in  
3 connection with a selected process point, determining  
4 if said selected process point is zoomable; and, if so

5 highlighting in a new navigation space the zoomed to  
6 process point.

1 5. The method of claim 1, further comprising the steps of:

2 responsive to user selection of a create process  
3 action, accepting and storing a 3-tuple and process

4 definition in a database of generally represented  
5 business processes.

1 6. The method of claim 5, further comprising the steps of:

2 responsive to user selection of a process edit action  
3 in connection with a selected process, displaying the  
4 process definition corresponding to said selected  
5 process for editing said selected process by said user.

1 7. The method of claim 5, further comprising the steps of:

2 responsive to user selection of a run process action in  
3 connection with a selected process from within the  
4 context of all other defined business processes for an  
5 organization in a multi-dimensional process space,  
6 executing said process.

1 9. System for representing any business process or  
2 processes, comprising:

3 a store containing for each of a plurality of said  
4 processes a 3-tuple including a noun, a verb and an  
5 attribute; and

6 a display operable to display a selected process as a  
7 point in navigation space.

1 10. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for representing any  
4 business processes, said method steps comprising:

5 defining each of a plurality of said processes as a 3-  
6 tuple including a noun, a verb and an attribute; and

7 displaying a selected process as a point in navigation  
8 space; said point representing logical changes in  
9 context of said navigation space for exploring or  
10 defining business processes.

1 11. An article of manufacture comprising:

2 a computer usable medium having computer readable  
3 program code means embodied therein for displaying  
4 representations of any business processes, the computer  
5 readable program means in said article of manufacture  
6 comprising:

7 computer readable program code means for causing a

8 computer to effect defining each of a plurality of said  
9 processes as a 3-tuple including a noun, a verb and an  
10 attribute; and

11 computer readable program code means for causing a  
12 computer to effect displaying a selected process as a  
13 point in navigation space; said process point  
14 representing logical change in context of said  
15 navigation space for exploring or defining business  
16 processes.

1 12. Method for representing any business processes  
2 comprising the steps of:

3 defining each of a plurality of processes as a 3-tuple  
4 including a noun, a verb and an attribute; and

5 displaying a selected process as a process point in  
6 navigation space; and

7 nesting a first navigation space in a process point in  
8 a second navigation space, said process points  
9 representing logical changes in context of said  
10 navigation spaces for exploring or defining business  
11 processes.



4 providing a business process representation including a  
5 set of points in a display of n-dimensional space, each  
6 point including at least one verb dimension, at least  
7 one noun dimension, and at least one attributes  
8 dimension, said set of points representing logical  
9 changes in context of said n-dimensional space for  
10 exploring or defining business processes; and  
11  
12 selecting a said point selectively to view, modify or  
13 execute the business process represented by said point.

1 34. The method of claim 33, further comprising the step of  
2 providing in at least one of said dimensions indicia the  
3 selection of which displays the corresponding noun, verb or  
4 attribute entries defined by a particular user.

5 36. A business process representation comprising:

6 a point in n-dimensional space including at least one  
7 verb dimension, at least one noun dimension, and at  
8 least one attributes dimension; said process point  
9 representing logical change in context of said space  
10 for exploring or defining business processes.

1 48. A program storage device readable by a machine,



2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for representing business  
4 processes, said method steps comprising

5 defining each of a plurality of processes as a 3-tuple  
6 including a noun, a verb and an attribute; and

7 displaying a selected process as a process point in  
8 navigation space; and

9 nesting a first navigation space in a process point in  
10 a second navigation space;

11 said process points representing logical changes in  
12 context of said navigation space for exploring or  
13 defining business processes.

1 50. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for delivering workflow  
4 solutions that are immediately useful for customers and  
5 readily modified by said customers, said method steps  
6 comprising:

7 providing to a customer a generic business process

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8 representation including a set of points in n-  
9 dimensional space, each point including at least one  
10 verb dimension, at least one noun dimension, and at  
11 least one attributes dimension; and  
  
12 enabling said customer by selecting a said point to  
13 modify said representation for the process represented  
14 by said point by selectively adding, deleting and  
15 changing a set of actions representing said verb  
16 dimension, a set of managed resource objects  
17 representing said noun dimension, and a set of  
18 expressions representing said attributes dimension,  
19 each said expression being capable of evaluation to a  
20 Boolean value.

1 51. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for capturing in workflow  
4 solutions the policies a business uses to guide its  
5 activities, said method steps comprising:

6 visually displaying in a display panel a navigation  
7 space and a plurality of scrollable lists including a  
8 noun list, a verbs list and an attributes list;

9 responsive to selection of a noun list entry, a verbs  
10 list entry, and an attributes list entry, highlighting  
11 in said navigation space a point representing a process  
12 tuple;

13 responsive to selection of two entries from two of said  
14 lists, highlighting in said navigation space a  
15 highlighted plane of points representing process tuples  
16 for all entries in the list not selected;

17 responsive to selection of a highlighted point  
18 displaying the definition the process represented by  
19 said highlighted point.

1 52. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for making known within an  
4 overall business context processes impacted by a policy,  
5 said method steps comprising:

6 visually displaying in a display panel a navigation  
7 space and a plurality of scrollable lists including a  
8 noun list, a verbs list and an attributes list;

9 representing in said navigation space a set of points

10 in n-dimensional space, each said point being a process  
11 tuple having a verb dimension, a noun dimension, and an  
12 attributes dimension;

13 responsive to selection of a policy in said attributes  
14 list, highlighting in said navigation space all process  
15 tuples representing process points including said  
16 policy.

1 53. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for enabling understanding  
4 of the mechanisms, interactions and inter-relationships of a  
5 business process, said method steps comprising:

6 representing said business process as a set of points  
7 in n-dimensional space including at least one verb  
8 dimension, at least one noun dimension, and at least  
9 one attributes dimension;

10 navigating said space by selecting and opening a  
11 process point to display another process  
12 representation; and

13 extending said space selectively by redefining said

14 dimensions and grouping scalar definitions into super  
15 scalar values.

1 54. A program storage device readable by a machine,  
2 tangibly embodying a program of instructions executable by a  
3 machine to perform method steps for defining current and  
4 future processes of an organization in a manner which  
5 facilitates understanding, use and change, said method steps  
6 comprising:

7 providing a business process representation including a  
8 set of points in n-dimensional space, each point  
9 including at least one verb dimension, at least one  
10 noun dimension, and at least one attributes dimension;  
11 said process points representing logical changes in  
12 context of said space for exploring or defining  
13 business processes; and

14 selecting a said point selectively to view, modify or  
15 execute the business process represented by said point.

16 56. System for representing any business processes  
17 comprising:

18 means for defining each of a plurality of processes as

19 a 3-tuple including a noun, a verb and an attribute;

20 means for displaying a selected process as a process  
21 point in navigation space; said process point  
22 representing logical changes in context of navigation  
23 space for exploring or defining business processes.;  
24 and

25 means for nesting a first navigation space in a process  
26 point in a second navigation space.

1 59. System for defining any current and future processes of  
2 an organization in a manner which facilitates understanding,  
3 use and change, comprising the steps of:

4 means for providing a business process representation  
5 including a set of points in n-dimensional space, each  
6 point including at least one verb dimension, at least  
7 one noun dimension, and at least one attributes  
8 dimension; said points representing logical changes in  
9 context of navigation space for exploring or defining  
10 business processes; and

11 means for selecting a said point selectively to view,  
12 modify or execute the business process represented by

said point.

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